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| APPLICATION NO.                       | F    | ILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------|------|------------|-------------------------|---------------------|------------------|
| 10/518,955                            |      | 12/17/2004 | Su Qian                 | 21033YP             | 8065             |
| 210                                   | 7590 | 08/11/2006 |                         | EXAMINER            |                  |
| MERCK A                               |      | INC        | WILSON, MICHAEL C       |                     |                  |
| P O BOX 2000<br>RAHWAY, NJ 07065-0907 |      |            |                         | ART UNIT            | PAPER NUMBER     |
|                                       |      |            | 1632                    |                     |                  |
|                                       |      |            | DATE MAILED: 08/11/2006 |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)          |  |  |  |  |  |
|--|---|-----------------------|--|--|--|--|--|
| Office Action Summany  | 10/518,955  | QIAN ET AL.           |  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit              |  |  |  |  |  |
|  | Michael C. Wilson   | 1632                  |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                       |  |  |  |  |  |
| Status   |   |                       |  |  |  |  |  |
| 1) Responsive to communication(s) filed on   |   |                       |  |  |  |  |  |
|  | -·<br>action is non-final.  |                       |  |  |  |  |  |
|  | ·   |                       |  |  |  |  |  |
|  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                               |                       |  |  |  |  |  |
| Disposition of Claims  | reparte quayro, 1000 0.2. 11, 10  | 0 0.0. 210.           |  |  |  |  |  |
| · <del>_</del>   |   |                       |  |  |  |  |  |
|  | Claim(s) <u>1-20</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration. |                       |  |  |  |  |  |
| Claim(s) is/are allowed.   |   |                       |  |  |  |  |  |
|  |   |                       |  |  |  |  |  |
|  | i) Claim(s) is/are rejected.  |                       |  |  |  |  |  |
| •  | ☐ Claim(s) is/are objected to. ☑ Claim(s) <u>1-20</u> are subject to restriction and/or election requirement.           |                       |  |  |  |  |  |
| o) Claim(s) 1-20 are subject to restriction and/or e   | riection requirement.   |                       |  |  |  |  |  |
| Application Papers   |   |                       |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |   |                       |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |   |                       |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |                       |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                       |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                       |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                       |  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |   |                       |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date   | 4)  Interview Summary<br>Paper No(s)/Mail Da<br>5)  Notice of Informal P<br>6)  Other:                                  |                       |  |  |  |  |  |

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## **DETAILED ACTION**

## Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-10 and 19, drawn to a transgenic non-human animal whose somatic cells and germ cells are homozygous or heterozygous for an altered agouti-related protein (AgRP) gene which encodes a non-functional AgRP protein (knockout), a cell line from the transgenic, a method making the transgenic and a method of using the transgenic.

Group II, claim(s) 8 and 9, drawn to a transgenic non-human animal whose somatic cells and germ cells are homozygous for an altered agouti-related protein (AgRP) gene and which contain and express a transgene comprising a gene for a non-native AgRP protein (knock-in), wherein said mouse is viable.

Group III, claim(s) 11-16 and 20, drawn to a transgenic non-human animal whose somatic cells and germ cells are homozygous for an altered agouti-related protein (AgRP) gene which encodes a non-functional AgRP protein and homozygous for an altered Neuropeptide Y (NPY) gene which encodes a non-functional NPY protein (double knockout) and a method of using the transgenic.

Group IV, claim(s) 17 and 18, drawn to a transgenic mouse whose somatic cells and germ cells lack functional genes coding for a murine AgRP protein and a NPY protein which contains and expresses a first transgene encoding a non-native AgRP protein and a second transgene encoding a non-native NPY protein.

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

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Claim 1 does not contribute over the prior art because Qian (Mol. Cell. Biol. July 2002, Vol. 22, No. 14, pg 5027-5035) taught an AgRP knockout mouse.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wilson whose telephone number is 571-272-0738. The examiner can normally be reached on M-F 10-6:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MICHAEL WILSON PRIMARY EXAMINER